

**UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF NEW YORK**

SOTER TECHNOLOGIES, LLC,	X	
	:	
PLAINTIFF,	:	
V.	:	Civ No.:
IP VIDEO CORPORATION, A+ TECHNOLOGY	:	
& SECURITY SOLUTIONS, INC., HALO SMART	:	
SOLUTIONS, INC. & ADVANCE	:	
CONVERGENCE GROUP, INC.	:	
DEFENDANTS.	:	
	X	

COMPLAINT

Plaintiff Soter Technologies LLC (“Soter”), by and through its undersigned counsel, hereby files this Complaint against IP Video Corporation, A+ Technology & Security Solutions, Inc., Halo Smart Solutions, Inc., and Advance Convergence Group (collectively “Defendants”):

NATURE OF THE ACTION

1. Soter is the owner of U.S. Patent No. 10,699,549 (“the ‘549 Patent”) protecting FlySense®—the world’s first vape detecting sensor device. FlySense® protects our nation’s children by helping authorities control the vaping and bullying crisis facing today’s youth.
2. Defendants are infringing the ‘549 Patent by making, using, selling, and offering for sale a vape detecting sensor device (“HALO Device”), inducing customers including school districts across the country to infringe, and contributing to infringement by third parties.
3. Defendants have been so bold as to state that if their activities with regard to HALO indeed lead to infringement of Soter’s patent—that a school using their HALO Device should be sued—rather than Defendants. As a result, multiple schools are at risk of Defendants shifting the

blame (and the cost) for their infringing acts onto them, including the Uniondale School District right here in the Eastern District of New York.

4. Upon information and belief, Defendants continue to offer the HALO Device for sale, since the issuance of the '549 Patent.

5. Defendants will continue to irreparably harm Soter until they are stopped by this Court.

THE PARTIES

6. Soter is a limited liability company organized under the laws of New York with a principal place of business at 113 Comac Street, Ronkonkoma, New York 11779.

7. Soter uses advanced sensor and software technology to solve public health and safety problems such as vaping and bullying, and to deliver innovative solutions for environmental and social intelligence to make the world a safer place.

8. The name "Soter" was inspired by Greek mythology, wherein Soter personifies safety, deliverance and preservation from harm.

9. Since the company's inception, Soter has remained focused on pioneering new technology to keep people safe.

10. For example, Soter was the first to help schools with vape detection and prevention. It was also the first to create a full body health scanner called SymptomSense™ in response to the current COVID 19 public health crisis.

11. Soter sells vape detecting sensor products to schools and institutions in corporate America such as insurance companies and Lyft, the ridesharing company.

12. Soter assists its school customers not only with vape and bullying detection and prevention, but also in aggregating data to help them safely open amidst the COVID 19 pandemic.

13. Soter's approach to vape detection and prevention involves using both technology and education. In addition to its own educational initiatives, Soter supports other organizations that educate others about the dangers of vaping including: (a) PAVE (Parents Against Vaping E-cigarettes); (b) ConsumerNotice.org; (c) Flavor Shook Kids; (d) Yale University's Center for Health & Learning Games; (e) Stanford Medicine's Modules for Tobacco and Nicotine Education; (f) DoSomething.org; (g) ShapeAmerica.org; (h) Prevention for Me; (i) ijustdidn'tknow.org; (j) Sunshine Behavioral Health; and (k) addictioncenter.com.

14. Upon information and belief, Defendant IP Video Corporation is a New York corporation organized under the laws of the State of New York with a principal place of business at 1490 N. Clinton Avenue, Bay Shore, New York 11706.

15. Upon information and belief, Defendant A+ Technology & Security Solutions, Inc. is a New York corporation organized under the laws of the State of New York with a principal place of business at 1490 N. Clinton Avenue, Bay Shore, New York 11706.

16. Upon information and belief, Defendant Halo Smart Solutions, Inc. is a New York corporation organized under the laws of the State of New York with a principal place of business at 1490 N. Clinton Avenue, Bay Shore, New York 11706.

17. Defendant Halo Smart Solutions Inc. ("HSS") resides at the same address as the other three Defendants. HSS is pursuing patent rights on a device that detects at least vaping.

18. Upon information and belief, Defendant Advance Convergence Group, Inc. is a Delaware corporation with a principal place of business at 1490 N. Clinton Avenue, Bay Shore, New York 11706.

19. Defendants conspire with one another to make, sell, offer for sale and distribute the infringing HALO Device. As reported by Newsday:

[T]he Halo Smart Sensor produced by Advance Convergence Group and affiliates IP Video Corp. and A+ Technology & Security Solutions Inc.- can be installed in high school bathrooms.¹

20. Defendant IP Video Corporation advertises the infringing HALO Device on its website and exhibits HALO at trade shows across the United States, including in New York.

21. Defendant A+ Technology & Security Solutions Inc. advertises the infringing HALO Device on its website.²

22. Defendant Advance Convergence Group (“ACG”) advertises the infringing HALO Device on its website.³

23. All three companies share office locations, resources and executives. For example, according to Defendants’ marketing materials and social media posts, David Antar is a top executive at all three entities—serving as President of IP Video Corporation and A+ Technology & Security Solutions Inc. and as Chief Executive Officer of ACG.

24. Further, all Defendants reside at the same Bay Shore location.

25. Upon information and belief, Defendants’ operations are international and they are engaged in interstate and foreign commerce.

JURISDICTION AND VENUE

26. The court has subject matter jurisdiction under 28 U.S.C. §§ 1331 and 1338 because this case arises under the United States Patent Laws, 35 U.S.C. § 271 et seq. and the Declaratory Judgment Act, 28 U.S.C. §§ 2201 and 2202.

¹ See “LI Firms make devices to help detect vaping use in schools,” <https://www.newsday.com/business/technology/vaping-schools-students-sensors-1.35657330> (last visited June 29, 2020).

² See VAPE & THC detection, Air Quality & Environmental Monitoring, Chemical Detection, Privacy Area Security, available at <https://aplustechnology.com/halo/> (last visited June 4, 2020).

³ See <http://advanceconvergence.com/> (last visited June 29, 2020).

27. Venue is proper in this district under 28 U.S.C. §§ 1400(b) and 1391(b)(1) and (2) because this is a judicial district in which all Defendants reside and because a substantial part of the events or omissions giving rise to Plaintiff's claim occurred in this district.

28. This court has personal jurisdiction over Defendants because each of them has a principal place of business in New York, in this District.

29. Defendants have had actual notice of the '549 Patent since at least July 1, 2020.

30. Nevertheless they continue to (i) offer for sale their HALO Device to schools across the country including this district since the '549 Patent issued and during the term of the patent; (ii) continue to use Plaintiff's invention to perform vape detection in a way that violates the '549 Patent since the '549 Patent issued and during the term of the patent; (iii) continue to make infringing HALO Devices during the term of the patent; and (iv) continue to induce others to infringe during the term of the patent.

31. On information and belief, Defendants are using and intend to continue using Plaintiff's invention during the term of the '549 Patent.

32. Despite notice of the '549 Patent, Defendants intend to continue to induce others to infringe the '549 Patent, including the Uniondale School District.

33. Despite notice of the '549 Patent, Defendants intend to continue to contribute to the infringement by others, during the term of the '549 Patent.

34. Defendants have stated publicly that any infringing use of HALO Devices by school districts constitute infringement by them, but not Defendants. For example, in the case of the White Plains School District, Defendants have represented that it is White Plains, but not Defendants, that is infringing the '549 Patent by using the HALO Device made and sold by Defendants.

**SOTER'S INTELLECTUAL PROPERTY PROTECTING
ITS FLYSENSE® VAPE DETECTION PRODUCT**

Soter's Patent Rights

35. On August 15, 2017, Soter filed U.S. Application No. 62/545,795, a provisional patent application entitled Sensor Systems and Methods (“’795 Application”).

36. The ‘795 Application discloses, among other things, a device using sensor technology to detect vaping and/or bullying.

37. On August 15, 2018, Soter filed PCT/US 2018/000223 (“Soter’s PCT Application”) claiming priority to the ‘795 Application.

38. Soter’s PCT Application discloses, among other things, a sensor system for detecting vaping and bullying including an air quality sensor configured to detect air quality, a sound detector configured to detect sounds and a network interface configured to transmit a signal indicating abnormality matching signature of vaping.

39. Soter’s PCT Application published as WO 2019/035950 on February 21, 2019.

40. On October 18, 2019, Soter filed U.S. Application No. 16/657,430 (“’430 Application”) entitled “System and Method for Identifying Vaping and Bullying,” which claims priority to the ‘795 Application.

41. The ‘430 Application issued on June 30, 2020 as U.S. Patent No. 10,699,549 containing thirty claims. See Exhibit A.

42. The ‘549 Patent has been duly and properly assigned in its entirety to Soter.

43. The ‘549 Patent is directed to identifying vaping based on detected air quality and identifying bullying based on detected sound.

44. When bullying and/or vaping are identified using Soter's patented invention, warnings or alerts are transmitted without indication to the persons who are vaping or bullying at a site, so that such persons can be properly reported and supervised.

45. Plaintiff's FlySense device is shown below.



46. Defendants' infringing HALO Device is shown below:




FIRST CAUSE OF ACTION
PATENT INFRINGEMENT
(35 U.S.C. § 271)

47. Plaintiff re-alleges each and every allegation set forth in Paragraphs 1 through 46 inclusive, and incorporate them by reference herein.

48. The manufacture, use, sale, offer for sale and/or importation of the HALO Device, infringes one or more claims of the '549 Patent, including but not limited to Claims 1, 6, 25 and 27-30. Infringement of representative claim 1 is shown in the claim chart below, which includes citations to Exhibits B-G to this complaint.

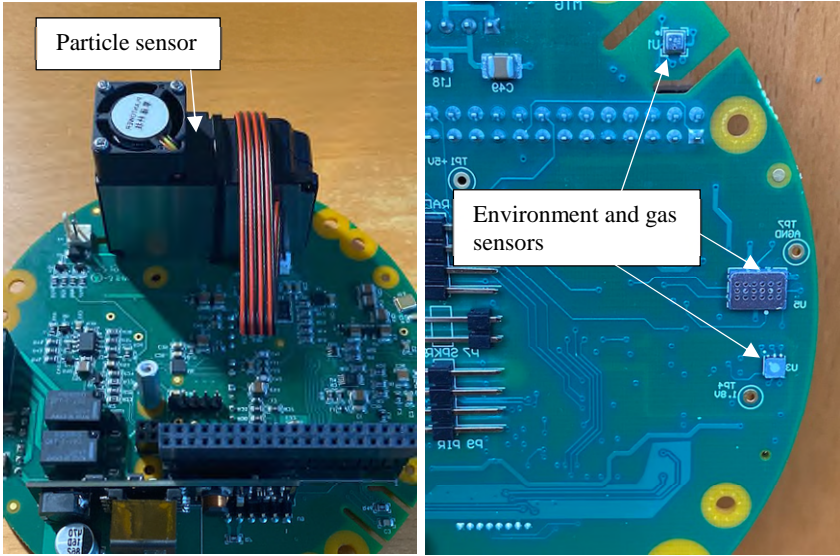

49. Defendants' actions as alleged herein constitute infringement, directly, contributorily, and/or through inducement of one or more claims of the '549 Patent under 35 U.S.C. §§ 271(a)-(c).

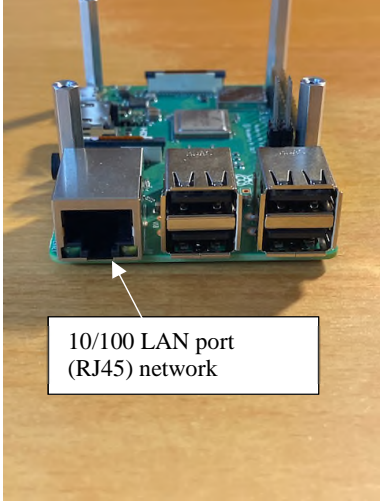
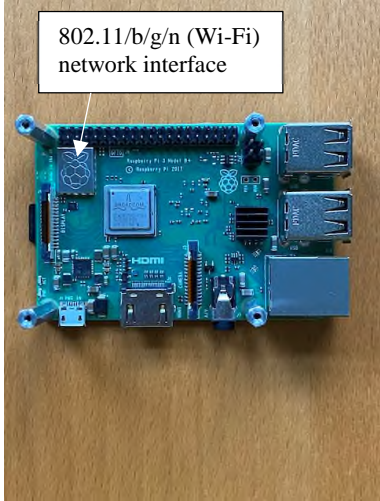
50. The sensor system in the HALO Device comprises an air quality sensor configured to detect air quality, the air quality sensor including a combination of sensors configured to sense air quality; and a network interface configured to transmit a signal indicating abnormality matching signature of vaping, and a controller configured to identify vaping based on the detected air quality, wherein the vaping is identified when the detected air quality includes the abnormality matching signature.

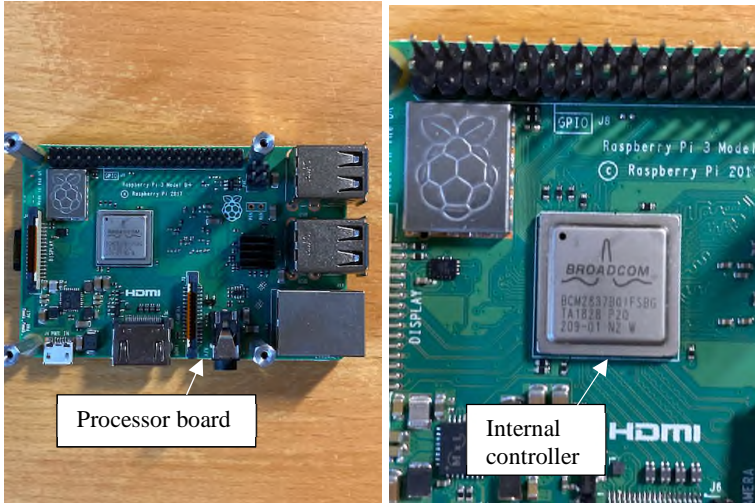
U.S. Patent No. 10,699,549		
<u>Claim</u>	<u>Element</u>	<u>Halo Product</u>
CLAIM 1		
1P	A sensor system comprising:	<p>The Halo Device is a "smart sensor." It is "...a device on the network..." with "Network Specifications."</p> <div style="display: flex; align-items: center; justify-content: center;">  <div style="margin-left: 20px;"> <p>VAPE & THC DETECTION</p> <p>AIR QUALITY & ENVIRONMENTAL MONITORING</p> <p>CHEMICAL DETECTION</p> <p>PRIVACY AREA SECURITY</p> </div> </div> <p>(HALO_A_5.2020 at *1 and *2)</p>
1a	an air quality sensor configured to detect air quality,	<p>The Halo Device "can detect... air quality changes."</p> <p>(HALO_General_11.27.19)</p>

U.S. Patent No. 10,699,549		
<u>Claim</u>	<u>Element</u>	<u>Halo Product</u>
CLAIM 1		
		<p>Detection</p> <p>What can HALO actually detect?</p> <p>HALO has a host of sensors to perform multiple detections. 12 sensors to be exact. The hundreds of combinations it detects expands its capabilities to be able to differentiate between substances as well. For instance, HALO can distinguish between a person vaping and a person vaping with a substance laced with THC.</p> <p>Some of the things HALO can detect are:</p> <ul style="list-style-type: none"> • Particulate matter • Humidity that produces mold and other Fungi • VOCs <ul style="list-style-type: none"> ◦ Formaldehyde ◦ Trichloroethylene ◦ Xylene • Benzene • Ammonia • Carbon Monoxide • Carbon Dioxide • Vape • THC • Smoke • Light • Vibration • Pressure • Temperature • Sound Abnormalities <p>(HALO FAQ I IPVideo Corporation FAQ recent at *2)</p> <p>HALO detects environmental changes that occur in these privacy concern areas and as a device on the network, it sends email, text and security platform alerts to designated security personnel. HALO can detect flammables, hazardous chemicals, air quality changes such as vaping and smoking and changes in temperature and humidity. HALO can also detect noise level fluctuations and can send alerts when unusual activity occurs such as a gunshot or aggressive behavior like fighting.</p> <p>(HALO_A_5.2020 at *1)</p>
1b	the air quality sensor including a combination of sensors configured to sense air quality; and	<p>The Halo Device “can detect... air quality changes.” (HALO_General_11.27.19)</p> <p>The Halo Device “has a host of sensors to perform multiple detections, 12 sensors to be exact.”</p>


U.S. Patent No. 10,699,549		
<u>Claim</u>	<u>Element</u>	<u>Halo Product</u>
CLAIM 1		
		<p>Detection</p> <p>What can HALO actually detect?</p> <p>HALO has a host of sensors to perform multiple detections. 12 sensors to be exact. The hundreds of combinations it detects expands its capabilities to be able to differentiate between substances as well. For instance, HALO can distinguish between a person vaping and a person vaping with a substance laced with THC.</p> <p>Some of the things HALO can detect are:</p> <ul style="list-style-type: none"> • Particulate matter • Humidity that produces mold and other Fungi • VOCs <ul style="list-style-type: none"> ◦ Formaldehyde ◦ Trichloroethylene ◦ Xylene • Benzene • Ammonia • Carbon Monoxide • Carbon Dioxide • Vape • THC • Smoke • Light • Vibration • Pressure • Temperature • Sound Abnormalities <p>(HALO FAQ I IPVideo Corporation FAQ recent at *2)</p> <p>HALO detects environmental changes that occur in these privacy concern areas and as a device on the network, it sends email, text and security platform alerts to designated security personnel. HALO can detect flammables, hazardous chemicals, air quality changes such as vaping and smoking and changes in temperature and humidity. HALO can also detect noise level fluctuations and can send alerts when unusual activity occurs such as a gunshot or aggressive behavior like fighting.</p> <p>(HALO_A_5.2020 at *1)</p> <p>The Halo's sensor board with the Plantower particle sensor is shown in the left photo below, and the photo on the right depicts environment and gas sensors also on the Halo's sensor board.</p>

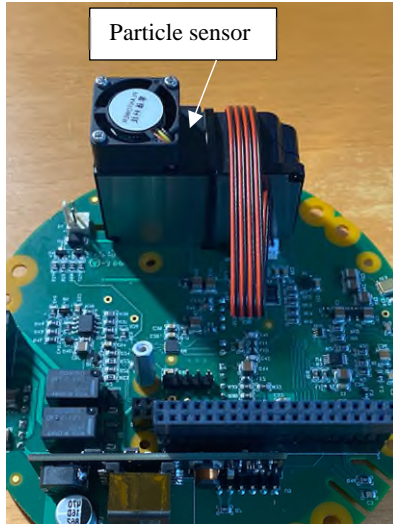
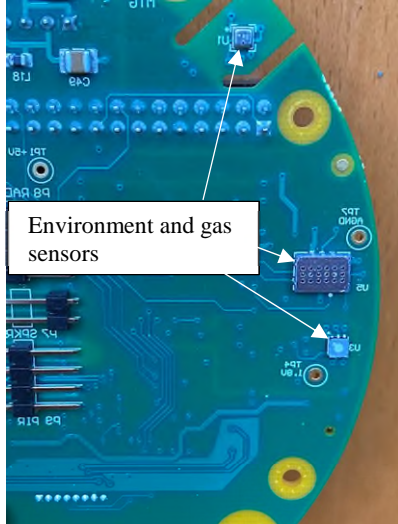
U.S. Patent No. 10,699,549		
<u>Claim</u>	<u>Element</u>	<u>Halo Product</u>
CLAIM 1		
		
1c	a network interface configured to transmit a signal indicating abnormality matching signature of vaping, and	<p>The Halo Device is “...a device on the network...” with “Network Specifications.” including RJ-45 (10/100 Base-T) network interface. (HALO_A_5.2020 at *1 and *2)</p> <p>The Halo Device “provides indications of VAPE... based on the presence of chemical signatures and particulates in the air.” “HALO detects environmental changes that occur... and as a device on the network, it sends email, text and security platform alerts to designated security personnel.”</p> <p>Can the readings from HALO be used as proof for legal action?</p> <p>HALO provides indications of VAPE and/or THC based on the presence of chemical signatures and particulates in the air. Although a highly effective indicator it is not to be used as 100% proof for legal action. Security and Administrative teams should use these readings to conduct their searches for physical evidence and utilize this physical evidence and investigative procedures for the basis of actions. We have had numerous accounts that have been effective in these methods and we would be happy to provide these references. IPVideo Corporation can also recommend consulting services on investigative procedure and policy enforcement if you require.</p> <p>(HALO FAQ I IPVideo Corporation FAQ recent at *3)</p> <p>HALO detects environmental changes that occur in these privacy concern areas and as a device on the network, it sends email, text and security platform alerts to designated security personnel. HALO can detect flammables, hazardous chemicals, air quality changes such as vaping and smoking and changes in temperature and humidity. HALO can also detect noise level fluctuations and can send alerts when unusual activity occurs such as a gunshot or aggressive behavior like fighting.</p> <p>(HALO_A_5.2020 at *1)</p> 

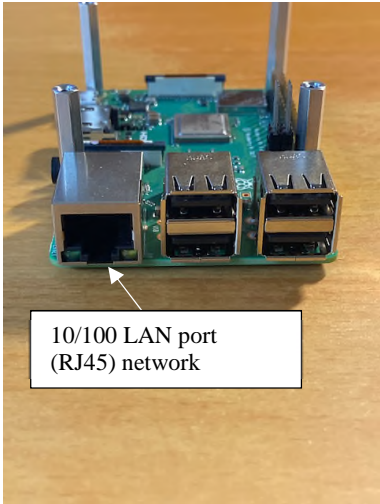
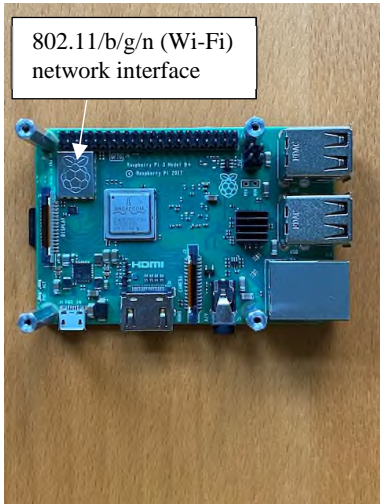
U.S. Patent No. 10,699,549		
<u>Claim</u>	<u>Element</u>	<u>Halo Product</u>
CLAIM 1		
		<p>In addition, the left photo below shows an RJ45 socket, on the processor board, providing a wired (using cables CAT5/5e/6) network interface. The processor board (Raspberry Pi) also provides a wireless network interface (Wi-Fi) shown in the photo on the right.</p> <div style="display: flex; justify-content: space-around; align-items: center;">   </div>
1d	a controller configured to identify vaping based on the detected air quality,	<p>The Halo Device “can detect... air quality changes such as vaping.”</p> <p>HALO detects environmental changes that occur in these privacy concern areas and as a device on the network, it sends email, text and security platform alerts to designated security personnel. HALO can detect flammables, hazardous chemicals, air quality changes such as vaping and smoking and changes in temperature and humidity. HALO can also detect noise level fluctuations and can send alerts when unusual activity occurs such as a gunshot or aggressive behavior like fighting.</p> <p>(HALO_A_5.2020 at *1)</p> <p>In addition, the left photo below shows the Halo’s processor board (Raspberry Pi 3B+) and the photo on the right shows the internal controller (Broadcom BCM2837) on the board.</p>

U.S. Patent No. 10,699,549		
<u>Claim</u>	<u>Element</u>	<u>Halo Product</u>
CLAIM 1		
		 <p>In The Halo Device, the event determination (e.g., vaping) is sent to an external controller or server (e.g., PC) residing on the network (e.g., Intranet or Internet) for end user access.</p>
1e	wherein the vaping is identified when the detected air quality includes the abnormality matching signature.	<p>Because indoor air quality is affected by pollutants (e.g., vaping) it is important to detect the concentration of such pollutants and identify when their concentration is above a certain threshold (i.e., “abnormality matching signature”).</p> <p>The Halo Device “can detect... air quality changes such as vaping.” The Halo Device “provides indications of VAPE... based on the presence of chemical signatures and particulates in the air.”</p> <p>HALO detects environmental changes that occur in these privacy concern areas and as a device on the network, it sends email, text and security platform alerts to designated security personnel. HALO can detect flammables, hazardous chemicals, air quality changes such as vaping and smoking and changes in temperature and humidity. HALO can also detect noise level fluctuations and can send alerts when unusual activity occurs such as a gunshot or aggressive behavior like fighting.</p> <p>(HALO_A_5.2020 at *1)</p> <p>Can the readings from HALO be used as proof for legal action?</p> <p>HALO provides indications of VAPE and/or THC based on the presence of chemical signatures and particulates in the air. Although a highly effective indicator it is not to be used as 100% proof for legal action. Security and Administrative teams should use these readings to conduct their searches for physical evidence and utilize this physical evidence and investigative procedures for the basis of actions. We have had numerous accounts that have been effective in these methods and we would be happy to provide these references. IPVideo Corporation can also recommend consulting services on investigative procedure and policy enforcement if you require.</p> <p>(HALO FAQ I IPVideo Corporation FAQ recent at *3)</p>

51. The HALO Device contains air quality sensors for identifying vaping at a site, including an environment sensor configured to detect temperature and humidity. The HALO Device further contains a network interface configured to transmit a signal indicating abnormality matching a signature of vaping, wherein the vaping is identified when the detected air quality includes a signature, as it can send event notifications to a central security system.

U.S. Patent No. 10,699,549		
<u>Claim</u>	<u>Element</u>	<u>Halo Product</u>
CLAIM 25		
25P	A sensor system for identifying vaping at a site, the sensor system comprising:	<p>The Halo Device is a “smart sensor.” It is “...a device on the network...” with “Network Specifications.”</p> <div style="display: flex; align-items: center;">  <div style="margin-left: 20px;"> <p>VAPE & THC DETECTION AIR QUALITY & ENVIRONMENTAL MONITORING CHEMICAL DETECTION PRIVACY AREA SECURITY</p> </div> </div> <p>(HALO_A_5.2020 at *1 and *2)</p> <div style="background-color: #0056b3; color: white; padding: 10px; text-align: center;"> <p>Air Quality Monitoring</p> <p>• Detection of vaping and smoking</p> </div> <p>(HALO_A_General_11.5.19 at *1)</p>
25a	an air quality sensor configured to detect air quality; and	<p>The Halo Device “can detect... air quality changes.”</p> <p>HALO detects environmental changes that occur in these privacy concern areas and as a device on the network, it sends email, text and security platform alerts to designated security personnel. HALO can detect flammables, hazardous chemicals, air quality changes such as vaping and smoking and changes in temperature and humidity. HALO can also detect noise level fluctuations and can send alerts when unusual activity occurs such as a gunshot or aggressive behavior like fighting.</p> <p>(HALO_A_5.2020 at *1)</p> <div style="background-color: #0056b3; color: white; padding: 10px; text-align: center;"> <p>Air Quality Monitoring</p> <p>• Detection of vaping and smoking</p> </div> <p>(HALO_A_General_11.5.19 at *1)</p>

U.S. Patent No. 10,699,549												
Claim	Element	Halo Product										
CLAIM 25												
		<p>The photo below on the left shows the Halo’s sensor board with the Plantower particle sensor, and the photo on the right shows the environment and gas sensors also on the sensor board. The particle sensor and the gas sensor (e.g., measuring TVOC and CO₂) are air quality sensors.</p> <div><div></div><div></div></div>										
25b	a network interface configured to transmit a signal indicating abnormality matching signature of vaping,	<p>The Halo Device is “...a device on the network...” with “Network Specifications.” including RJ-45 (10/100 Base-T) network interface.</p> <table><tr><th colspan="2">Network Specifications</th></tr><tr><td>Ethernet</td><td>RJ-45 (10/100 Base-T)</td></tr><tr><td>Alarm Triggers</td><td>Particulates, Carbon Dioxide Equivalents, Total Volatile Organic Compounds, Carbon Monoxide, Ammonia, Temperature/Humidity, Light Level, Sound Levels, Tamper, Vape, Vape THC, Aggression, Gunshot, Spoken Key Word</td></tr><tr><td>Protocols</td><td>TCP/IP, UDP, IPV4/V6, HTTP, HTTPS, DHCP, ARP, Bonjour, Wireless Connectivity</td></tr><tr><td>Maximum Users Connections</td><td>Live MJPEG Stream, 8 Users</td></tr></table> <p>(HALO_A_5.2020 at *1 and *2)</p> <p>Because indoor air quality is affected by pollutants (e.g., vaping) it is important to detect the concentration of such pollutants and identify when their concentration is above a certain threshold (i.e., “abnormality matching signature”).</p> <p>The Halo Device “provides indications of VAPE... based on the presence of chemical signatures and particulates in the air.” “HALO detects environmental changes that occur... and as a device on the network, it sends email, text and security platform alerts to designated security personnel.”</p>	Network Specifications		Ethernet	RJ-45 (10/100 Base-T)	Alarm Triggers	Particulates, Carbon Dioxide Equivalents, Total Volatile Organic Compounds, Carbon Monoxide, Ammonia, Temperature/Humidity, Light Level, Sound Levels, Tamper, Vape, Vape THC, Aggression, Gunshot, Spoken Key Word	Protocols	TCP/IP, UDP, IPV4/V6, HTTP, HTTPS, DHCP, ARP, Bonjour, Wireless Connectivity	Maximum Users Connections	Live MJPEG Stream, 8 Users
Network Specifications												
Ethernet	RJ-45 (10/100 Base-T)											
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U.S. Patent No. 10,699,549		
<u>Claim</u>	<u>Element</u>	<u>Halo Product</u>
CLAIM 25		
		<p>Can the readings from HALO be used as proof for legal action?</p> <p>HALO provides indications of VAPE and/or THC based on the presence of chemical signatures and particulates in the air. Although a highly effective indicator it is not to be used as 100% proof for legal action. Security and Administrative teams should use these readings to conduct their searches for physical evidence and utilize this physical evidence and investigative procedures for the basis of actions. We have had numerous accounts that have been effective in these methods and we would be happy to provide these references. IPVideo Corporation can also recommend consulting services on investigative procedure and policy enforcement if you require.</p> <p>(HALO FAQ I IPVideo Corporation FAQ recent at *3)</p> <p>HALO detects environmental changes that occur in these privacy concern areas and as a device on the network, it sends email, text and security platform alerts to designated security personnel. HALO can detect flammables, hazardous chemicals, air quality changes such as vaping and smoking and changes in temperature and humidity. HALO can also detect noise level fluctuations and can send alerts when unusual activity occurs such as a gunshot or aggressive behavior like fighting.</p> <p>(HALO_A_5.2020 at *1)</p> <p>With HALO, designated personnel will be alerted when environmental changes occur in typically unsupervised areas. HALO can detect flammables, hazardous chemicals, air quality changes such as vaping and smoking and changes in temperature and humidity. HALO can</p> <p>(HALO_General_11.27.19 at *1)</p> <p>The photo on the left below shows an RJ45 socket, on the processor board, providing a wired (using cables CAT5/5e/6) network interface. The processor board (Raspberry Pi) also provides a wireless network interface (Wi-Fi) shown in the photo on the right.</p> <div style="display: flex; justify-content: space-around; align-items: flex-end;">   </div>
25c	wherein the vaping is identified when the detected air	<p>The Halo Device “can detect... air quality changes such as vaping.” The Halo Device “provides indications of VAPE... based on the presence of chemical signatures and particulates in the air.”</p>

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<u>Claim</u>	<u>Element</u>	<u>Halo Product</u>
CLAIM 25		
	quality includes a signature.	<p>HALO detects environmental changes that occur in these privacy concern areas and as a device on the network, it sends email, text and security platform alerts to designated security personnel. HALO can detect flammables, hazardous chemicals, air quality changes such as vaping and smoking and changes in temperature and humidity. HALO can also detect noise level fluctuations and can send alerts when unusual activity occurs such as a gunshot or aggressive behavior like fighting.</p> <p>(HALO_A_5.2020 at *1)</p> <p>Can the readings from HALO be used as proof for legal action?</p> <p>HALO provides indications of VAPE and/or THC based on the presence of chemical signatures and particulates in the air. Although a highly effective indicator it is not to be used as 100% proof for legal action. Security and Administrative teams should use these readings to conduct their searches for physical evidence and utilize this physical evidence and investigative procedures for the basis of actions. We have had numerous accounts that have been effective in these methods and we would be happy to provide these references. IPVideo Corporation can also recommend consulting services on investigative procedure and policy enforcement if you require.</p> <p>(HALO FAQ I IPVideo Corporation FAQ recent at *3)</p> <p>With HALO, designated personnel will be alerted when environmental changes occur in typically unsupervised areas. HALO can detect flammables, hazardous chemicals, air quality changes such as vaping and smoking and changes in temperature and humidity. HALO can</p> <p>(HALO_General_11.27.19 at *1)</p>

52. Defendants are directly infringing at least Claims 1, 6, 25 and 27-30 of the ‘549 Patent by making, using, selling, offering for sale and/or importing the HALO Device in the United States including within this judicial district, in violation of 35 U.S.C. § 271(a).

53. Since the issuance of the ‘549 Patent, upon information and belief, Defendants continue to offer the HALO Device for sale, including to the Uniondale School District in this district and the Bound Brook High School in the District of New Jersey.

54. Upon information and belief, Defendants know of the ‘549 Patent and that their manufacture, use, sale, offers for sale and or importation of the HALO Device infringes at least one claim of the ‘549 Patent, including but not limited to Claims 1, 6, 25 and 27-30.

55. Upon information and belief, Defendants have entered into service contracts with their customers, and through these service contracts Defendants are enabling and facilitating their

customers' use of the HALO Device. As a result, Defendants intend to induce the infringement of at least one claim of the '549 Patent, including but not limited to Claims 1, 6, 25 and 27-30.

56. Defendants have been and are actively inducing infringement of at least one claim of the '549 Patent, including but not limited to Claims 1, 6, 25 and 27-30, by actively and knowingly inducing others to use the HALO Device, including school districts in the State of New York, in violation of 35 U.S.C. § 271(b).

57. Upon information and belief, Defendants intend to continue to actively induce the infringement of at least one claim of the '549 Patent, including but not limited to Claims 1, 6, 25 and 27-30, by actively and knowingly inducing others to make, use, sell, offer for sale and/or import the HALO Device.

58. Defendants have been and are contributing to the infringement of at least one claim of the '549 Patent, including but not limited to Claims 1, 6, 25 and 27-30, by selling or offering to sell the HALO Device knowing it to be especially made for or adapted for practicing the invention of the '549 Patent and not a staple article or commodity of commerce suitable for substantial non-infringing use, in violation of 35 U.S.C. § 271(c).

59. Defendants' infringement has been, and continues to be knowing, intentional and willful.

60. At all relevant times, Defendants knew their actions constituted infringement of the '549 Patent and acted in reckless disregard thereof.

61. Since Defendants' infringement has continued despite receipt of actual notice of the '549 Patent on July 1, 2020, their infringement is willful under 35 U.S.C. § 284.

62. This case is exceptional and, therefore, Plaintiff is entitled to an award of attorneys' fees pursuant to 35 U.S.C. § 285.

63. Plaintiff has sustained injury and damage caused by Defendants' conduct.

64. Plaintiff has suffered, and will continue to suffer, irreparable harm from Defendants' acts and conduct complained of herein, unless restrained by law.

65. Plaintiff is entitled to attorney fees, prejudgment interest, damages, including lost profits and, where applicable, a reasonable royalty, and a preliminary and permanent injunction against further infringement of the '549 Patent.

SECOND CAUSE OF ACTION
DECLARATORY JUDGMENT OF PATENT INFRINGEMENT
28 U.S.C. §§ 2201 and 2202

66. Plaintiff re-alleges each and every allegation set forth in Paragraphs 1 through 65 inclusive, and incorporate them by reference herein.

67. There is an actual case or controversy such that the Court may entertain Plaintiff's request for declaratory relief consistent with Article III of the United States Constitution, and this actual case or controversy requires a declaration of rights by this Court.

68. Prior to and continuously up to the issuance of the '549 Patent, Defendants manufactured, sold, offered for sale, used, enabled the use of, supplied and/or imported the HALO Device.

69. These acts by Defendants would have infringed at least one claim of the '549 Patent, including but not limited to Claims 1, 6, 25 and 27-30, induced the infringement of at least one claim of the '549 Patent, including but not limited to Claims 1, 6, 25 and 27-30 and contributed to the infringement of at least one claim of the '549 Patent, including but not limited to Claims 1, 6, 25 and 27-30, had they occurred on or after June 30, 2020.

70. Upon information and belief, since the issuance of the '549 Patent, Defendants intend to continue these acts of infringement of at least one claim of the '549 Patent, including but not limited to Claims 1, 6, 25 and 27-30, and thus continued infringement is imminent.

71. Defendants have made, and will continue to make, substantial preparation in the United States to manufacture, use, offer to sell, sell and/or import Defendants' HALO Device before the expiration date of the '549 Patent.

72. Upon information and belief, any commercial manufacture, use, offer for sale, sale, and/or importation of Defendants' HALO Device will directly infringe, contributorily infringe and/or induce infringement of at least one claim of the '549 Patent, including but not limited to Claims 1,6, 25 and 27-30.

73. Plaintiffs are entitled to a declaratory judgment that future commercial manufacture, use, offer for sale, sale, and/or importation of Defendants' HALO Device will constitute infringement of at least one claim of the '549 Patent, including but not limited to Claims 1, 6, 25 and 27-30.

74. Since at least July 1, 2020, (i) Defendants have had actual knowledge of the '549 Patent and that the manufacture, sale, offers to sell and use of the HALO Device infringes at least one claim of the '549 Patent, including but not limited to Claims 1, 6, 25 and 27-30, that (ii) Defendants intend to cause infringement of at least one claim of the '549 Patent, including but not limited to Claims 1, 6, 25 and 27-30 and (iii) Defendants are inducing customers to infringe at least one claim of the '549 Patent, including but not limited to Claims 1, 6, 25 and 27-30 or are supplying a material component of the patented invention to cause infringement of at least one claim of the '549 Patent, including but not limited to Claims 1, 6, 25 and 27-30.

75. Upon information and belief, Defendants intend to continue actively inducing the infringement of at least one claim of the '549 Patent, including but not limited to Claims 1, 6, 25 and 27-30, by actively and knowingly inducing others to make, use, sell, offer for sale and/or import the HALO Device, in violation of 35 U.S.C. § 271(b).

76. Defendants have been and are contributing to the infringement of at least one claim of the '549 Patent, including but not limited to Claims 1, 6, 25 and 27-30, by selling or offering to sell the HALO Device knowing it to be especially made for or adapted for practicing the invention of the '549 Patent and not a staple article or commodity of commerce suitable for substantial non-infringing use, in violation of 35 U.S.C. § 271(c).

77. Plaintiff has sustained injury and damage caused by Defendants' conduct.

78. Plaintiff has suffered, and will continue to suffer, irreparable harm from Defendants' acts and conduct complained of herein, unless restrained by law.

79. Plaintiff is entitled to judgment that the continued manufacture, use, sale, offer for sale and/or importation of the HALO Device will infringe the '549 Patent and a preliminary and permanent injunction against any infringement of the '549 Patent.

PRAYER FOR RELIEF

WHEREFORE, Plaintiff Soter Technologies LLC prays for the following relief:

A. A judgment that Defendants have directly infringed, actively induced and contributed to infringement of U.S. Patent No. 10,699,549, including but not limited to Claims 1, 6, 25 and 27-30 thereof;

B. A judgment that Defendants' continued manufacture, use, sale, offer for sale or importation of the HALO Device will directly infringe, actively induce and contribute to

infringement of U.S. Patent No. 10,699,549, including but not limited to Claims 1, 6, 25 and 27-30 thereof;

C. A judgment that such infringement was willful;

D. A judgment that this case is exceptional under 35 U.S.C. § 285 and that Soter Technologies be awarded all its litigation expenses, including without limitation, its reasonable attorneys' fees;

E. A preliminary and permanent injunction enjoining Defendants and all of their agents, representatives, affiliates and related companies from:

- (1) Offering for sale and selling the HALO Device and any other product that infringes Plaintiff's U.S. Patent No. 10,699,549;
- (2) Making, importing, marketing, using, soliciting, or distributing the HALO Device and any other product that infringes Plaintiff's '549 Patent;
- (3) Updating, servicing or replacing any HALO Devices already installed at customer locations including but not limited to schools;
- (4) Exhibiting the HALO Device at any trade shows;
- (5) Inducing, encouraging, contributing to, and/or assisting, aiding or abetting another to exhibit the HALO Device at any trade shows;
- (6) Inducing, encouraging, contributing to, and/or assisting, aiding or abetting another in offering for sale, sale, making, importing, marketing, use, solicitation, or distribution of the HALO Device;
- (7) Inducing, encouraging, contributing to, and/or assisting, aiding or abetting another in the updating, servicing or replacement of HALO Devices already installed at customer location including but not limited to schools; or

(8) Effecting any assignments or transfers, forming new entities or using any other device for the purpose of circumventing the prohibitions contained in subparagraphs (1) through (7).

F. Actual damages to be proven at trial, including but not limited to compensatory damages for patent infringement;

G. An award of treble damages and attorneys' fees under 35 U.S.C. § 285;

H. Consequential, special, treble, exemplary and punitive damages;

I. Attorneys' fees, expenses, and costs;

J. Prejudgment and Post-judgment interest; and

K. Such other and further relief as the Court deems just and reasonable.

JURY DEMAND

In accordance with Federal Rule of Civil Procedure 38(b), Plaintiff Soter Technologies LLC hereby demands a trial by jury on all issues so triable.

Dated: July 6, 2020

/s/ Wendy R. Stein

Wendy R. Stein
GIBBONS P.C.
1 Pennsylvania Plaza, 37th Floor
New York, NY 10119

Christopher H. Strate
Thomas J. Bean
Christine A. Gaddis
GIBBONS P.C.
One Gateway Center
Newark, NJ 07102

*Attorneys for Plaintiff
Soter Technologies LLC*